

OKLAHOMA EMERGENCY DEPARTMENT UTILIZATION

EXECUTIVE SUMMARY
NOVEMBER 22, 2015

Government Human Services Consulting

Introduction and Background

The Oklahoma Health Care Authority (OHCA) contracted with Mercer Government Human Services Consulting (Mercer), a part of Mercer Health & Benefits LLC, to analyze one of the key drivers of health care cost, emergency department (ED) utilization. EDs have become the front door to health care for many Americans, and often, ED visits are for non-urgent — and even routine — health care problems. The costs of these low-acuity ED visits can be more than triple the cost of treatment in a primary or urgent care setting. Nationally the estimates of waste in the health care system related to unnecessary ED visits totaled approximately \$14 billion in 2010, not including replacement costs had services been delivered in a more appropriate setting. However, to put spending for ED visits in perspective, the Medicaid and Children’s Health Insurance Program (CHIP) Payment and Access Commission (MACPAC) estimated that spending on ED visits represented only about 4% of the overall Medicaid spend in 2011.¹ In Oklahoma’s SoonerCare program ED services accounted for approximately \$198 million from July 2012 through December 2013, less than 2% of the State’s total Medicaid spend. So, why the significant interest in ED utilization?

With the mission “...to responsibly purchase state and federally funded health care in the most efficient and comprehensive manner possible; and to analyze and recommend strategies for optimizing the accessibility and quality of health care; and to cultivate relationships to improve the health outcomes of Oklahomans”, the OHCA is seeking to fully understand ED utilization in the state and gather strategies for most appropriately managing utilization in the best manner for the Medicaid population.

This executive summary presents key findings from Mercer’s August 31, 2015 Oklahoma Emergency Department Utilization report. The full report: includes a detailed description of the Oklahoma Medicaid population and SoonerCare programs; describes development of the primary care treatable and low-acuity definition of ED utilization; provides detailed statistical analysis of SoonerCare ED utilization; shares a description and results of Mercer’s low-acuity non-emergent (LANE) methodology; presents mapping of geographic trends in ED utilization; and summarizes other state approaches to managing ED utilization.

Oklahoma Medicaid Program and Initiatives

SoonerCare, Oklahoma’s Medicaid program, provides coverage through a wide variety of health care benefits and innovative programs to a diverse population of adults and children, often considered to be the most vulnerable citizens in the State. To accomplish its goal, the OHCA utilizes two different health care delivery models and a variety of programs and initiatives through which it administers the various benefit packages.

SoonerCare Traditional

In this “traditional” fee-for-service (FFS) payment model, SoonerCare Traditional enrollees receive a comprehensive medical benefit plan and can access services from contracted SoonerCare providers; enrollees are not required to select a primary care provider (PCP). Traditional provides coverage for members who are institutionalized, in state or tribal custody, covered under a commercial health maintenance organization (HMO), enrolled under one of the Home and Community-Based Services (HCBS) waivers or dually eligible for both Medicare and Medicaid services; approximately 31% of SoonerCare Traditional enrollees are dual eligible.

¹ MACFacts, “Revisiting Emergency Department Use in Medicaid”, July 2014, https://www.macpac.gov/wp-content/uploads/2015/01/MACFacts-EDuse_2014-07.pdf last accessed 07-29-15.

SoonerCare Choice

SoonerCare Choice provides a managed care option typically referred to as “enhanced” primary care case management (PCCM) more commonly known as the patient-centered medical home (PCMH) model. The PCMH model is centered on enrollees selecting a PCP who is responsible for providing a medical home for the member. The SoonerCare Choice model provides Medicaid benefits to over 70% of all SoonerCare enrollees.

Other SoonerCare Programs

The OHCA operates a number of other programs that offer either limited benefits or premium assistance to qualifying individuals including those who are currently receiving home and community based services.

- *Sooner Plan (family planning services and contraceptive products).*
- *Soon-to-be-Sooners (pregnancy-related medical services).*
- *SoonerCare Supplemental (dual eligibles).*
- *Insure Oklahoma Employer-Sponsored Insurance (ESI) (premium assistance for small businesses).*
- *Insure Oklahoma Individual Plan (basic health services for uninsured adults).*

SoonerCare Initiatives

Over the past seven years, the OHCA has implemented initiatives that can be classified as population care management and PCP practice transformation; these initiatives are not mutually exclusive to each other. The purpose of these initiatives includes engagement of SoonerCare enrollees in active health care decision-making, including choosing where to receive health care services and developing self-management skills to support ongoing efforts to manage individual chronic conditions; the delivery system initiatives additionally focus on quality of care and expanding program access.

- The case management unit focuses on individuals with complex or high risk health care needs such as high risk pregnancies, medically complex newborns, children and adults; women undergoing breast or cervical cancer treatment, and individuals with repeated ED visits.
- The OHCA’s Health Management Program (HMP) and their Chronic Care Unit (CCU) engage members through methods such as individual telephonic support and embedding health coaches and facilitators in larger volume primary care practices.
- Patient Centered Medical Home (PCMH) members are aligned with a PCP who is responsible for meeting strict access and quality of care standards. PCMH providers are paid a monthly care management fee based on the number of quality standards met. Exhibit 1 provides information on the success of the PCMH model.
- Health Access Network (HAN) provider systems are community-based, integrated networks intended to advance program access, quality and cost-effectiveness goals by offering greater care coordination support to affiliated PCMH providers.

Exhibit 1: Medical Homes and Inappropriate ED Utilization

Recent research indicates that medical home models can curb inappropriate ED utilization 5-8%.

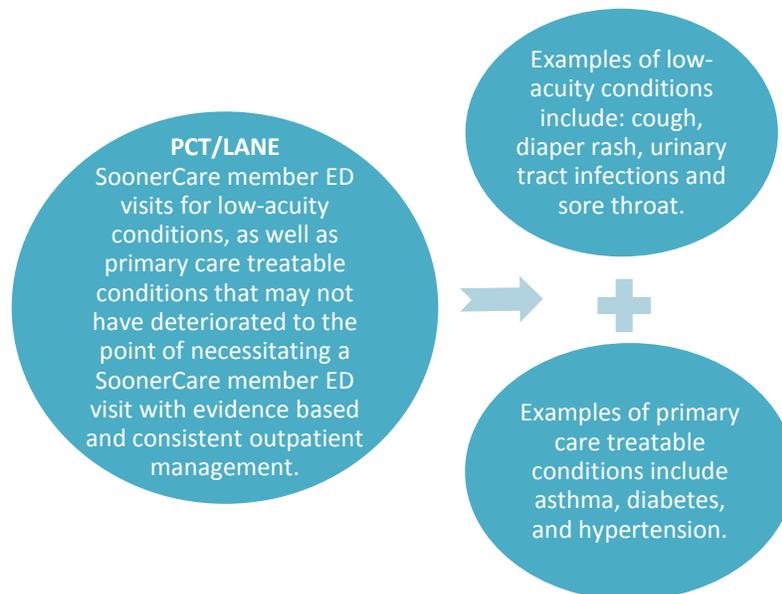
Defining the Issue

According to federal law, EDs are required to evaluate and treat all patients with emergency conditions regardless of their ability to pay. Additionally, EDs must be staffed, equipped and ready to treat all types of patients with all types of conditions 24 hours a day, 7 days of the week, and 365 days of the year. According to the National Hospital Association, ED visits increased an unprecedented 44% from 88.5 million in 1991 to 127.2 million in 2010. However, during the same period, EDs closed at a rate of almost 11 percent. These figures underscore the strain that many EDs face and highlight the importance of ensuring that precious ED resources are used in the most efficient and effective manner.

Not all ED utilization is preventable or “inappropriate”. In fact, much of it is legitimate and necessary. However, it is important to be able to parse ED utilization into different categories in order to identify the potential drivers that cause unnecessary utilization and to develop programs and interventions to curtail this type of utilization. In order to examine and analyze potentially “inappropriate” ED utilization, first a standardized definition needed to be developed in which the OHCA could consistently identify and quantify the component of ED utilization typically referred to in terms such as “avoidable”, “preventable”, and “inappropriate”.

Mercer drew on our experience working with other state Medicaid programs to help inform the development of terminology that could be used to define a subset of ED visits that are typically referenced by terms such as “inappropriate”, “unnecessary”, “avoidable” and/or “preventable”. Exhibit 2 provides information on low-acuity and primary care treatable conditions.

Exhibit 2: Primary Care Treatable/Low-Acuity Non-Emergent (PCT/LANE) Definition and Examples of Conditions



Mercer also conducted telephonic interviews with various stakeholders including OHCA staff members, community primary care physicians, hospital representatives, and ED physicians to identify how the definition may differ from the provider’s perspective.

Throughout the remainder of this executive summary, ED utilization that is often referred to as “inappropriate”, “unnecessary”, “avoidable” or “preventable” will be referred to as primary care treatable and/or low-acuity non-emergent. Primary care treatable and/or low-acuity non-emergent can be defined as those ED visits by SoonerCare members for low-acuity conditions that may not have deteriorated to the point of necessitating a SoonerCare member ED visit with evidence based and consistent outpatient management.

Statistical Analysis of ED utilization in Oklahoma

The OHCA shared member eligibility and provider and member claims data files with Mercer. For the statistical analysis, the eligibility file was augmented by member information from the various populations in SoonerCare, including Patient Centered Medical Homes (PCMHs), Health Management Program (HMP) and Health Access Network (HAN). Also added to the eligibility file were distance measures generated by the geospatial analysis: distance from the member’s address in the eligibility file to the closest PCP and hospital, as well as to the member’s chosen PCP (if available for non-SoonerCare Choice members).

The time period for analysis was July 1, 2012 to December 31, 2013. For purposes of analysis, members were divided into two populations: the first was SoonerCare Choice, the second was SoonerCare Traditional.

From the member claims files, ED visits were counted per member, and paid claims were summed to calculate total visit cost and ED per member per month (PMPM) dollars paid during the study period. The primary diagnosis code for each ED visit was captured from the member claims file. The distance to the visited hospital was also added by the geospatial analysis to the member claims file. Members with more than six ED visits in the eighteen month study period were categorized as “frequent ED users”.

It should be noted that movement between programs, changes in health management programs and health access networks during the study period affect how the statistics that follow can be interpreted.

Mercer conducted descriptive, univariate and multivariate statistical analyses. As a first step in the analysis, Mercer conducted descriptive statistical analyses. Data were summarized for the entire SoonerCare population, SoonerCare Choice, SoonerCare Traditional and members with at least one ED visit during the study period. ED utilization rates per 1,000 member months were calculated as the number of ED visits divided by the number of member months, multiplied by 1,000. Complete tables of statistical analyses are presented in the comprehensive report.²

SoonerCare Demographics

Nearly 60% of SoonerCare members in the study population were under the age of 21, with the majority identified as female and Caucasian. Just over 50% of Medicaid members lived in urban areas. Almost 70% were part of the Temporary Assistance to Needy Families (TANF) aid category. Twelve percent of the study population was dual eligible (Medicaid and Medicare) and just over 5% were pregnant. More than 82% of SoonerCare members lived within 10 miles of a hospital and 94% lived within 10 miles of the closest PCP. More than 61% of the SoonerCare population was part of

² The full statistical analysis can be found in the Mercer report, Oklahoma Emergency Department Utilization, November 5, 2015, Appendix B.

the SoonerCare Choice managed care program. Nearly 39% of the SoonerCare population was part of the SoonerCare Traditional program. For purposes of analysis, this group was made up of all SoonerCare members who were not part of SoonerCare Choice.

More than 65% of the overall SoonerCare population had zero ED visits during the eighteen-month study period and 82.6% of members had fewer than two ED visits during the study period. The balance, 17.4% of the population, had two or more ED visits, and 2.5% had six or more ED visits.

ED Utilization Descriptive Analyses

Various statistical analyses were conducted to study the relationship between member demographics and ED utilization. Overall, members with higher rates of ED utilization were female, infants or those over 21 years of age. As could be anticipated, those in the aged, blind or disabled (ABD) aid category had far higher ED utilization rates than any other aid category and those members that are dually eligible for Medicare and Medicaid had higher utilization than those members that are not dually eligible for Medicare and Medicaid. ED utilization for members with a chosen PCP (a selection made by SoonerCare Choice members only) within five miles of their home address was lower than for those with a chosen PCP greater than five miles away.

Two findings that warrant additional discussion are that SoonerCare Choice members had higher ED utilization rates (68.1 per 1,000 member months) than SoonerCare Traditional members (55.5 per 1,000 member months) and members enrolled in the OHCA's HMP had higher ED rates (169.3 per 1,000 member months) than members not enrolled in the OHCA's HMP (62.5 per 1,000 member months). While initially these findings seem counter to the intent and effort of the programs, there are two key details to keep in mind. First, as noted above, crossover claims for those members who are dual eligible were not available; this limits overall comparative analysis. Second, there must be recognition of the overall health and probable multiple chronic conditions of the members who make up these populations; the analysis focused on the primary diagnosis of the ED visit exclusively. This consideration of overall member health should be carried throughout the remainder of the report.

After the initial descriptive analyses were completed, additional analyses were conducted with those members considered to be frequent ED utilizers (those with 6+ ED visits between July 1, 2012 and December 31, 2013). The majority of the results mirrored those in the descriptive analysis, meaning the population of frequent ED utilizers is similar to the overall population of ED utilizers.

Additional analyses were completed to explore the relationship between frequent ED utilization and eighteen months of continuous enrollment in Medicaid. Two factors that became statistically significant when controlling for continuous enrollment were being a SoonerCare Choice member and taking part in a HAN. As the analysis continued, and comparisons between combinations of programs and demographic factors were analyzed the following key findings were identified:

- While SoonerCare Choice members overall were more likely to be frequent ED utilizers, this was not the case if the member's chosen PCP was within five miles of their home and the member was not part of the OHCA's HMP or a HAN.
- SoonerCare Choice members in a HAN only and without a chosen PCP within five miles of their home are more likely to be frequent ED utilizers.

Program comparisons were conducted on the basis of ED PMPM dollars spent. Within SoonerCare Traditional, non-Part A Medicare members have a \$20 higher PMPM cost. All SoonerCare Choice

program combinations have a higher PMPM cost than Traditional members. However, members in a HAN and/or members with a chosen PCP closer than five miles show the smallest differences with Traditional non-Part A Medicare members.

Within SoonerCare Choice, members who are in neither a HAN or the OHCA’s HMP, or are in a HAN only but do not have a chosen PCP within five miles, have a slightly higher PMPM cost than those in neither a HAN nor the OHCA’s HMP, or in a HAN only who have a chosen PCP within five miles. In summary, there is evidence that having a chosen PCP within five miles may provide some cost savings for a subset of the population.

Low-Acuity Non-Emergent (LANE) ED Utilization Methodology

Mercer developed an analytical process specifically to identify and quantify the impact of low-acuity non-emergent (LANE) ED usage. The LANE analysis provides a systematic and evidenced-based approach for evaluating trends and patterns of ED utilization. The analysis is underpinned by extensive health services research with additional input from an expert panel including ED physicians, state Medicaid chief medical officers, and other clinical providers with Medicaid and managed care experience.

Low-acuity non-emergent visits are determined by diagnosis (ICD-9) and evaluation and management codes. Mercer has identified 701 ICD-9 codes related to conditions that can be considered low-acuity and non-emergent that have the potential to be considered LANE conditions. Evaluation and management (E&M) codes that are used for visits to the ED include 99281, 99282, 99283, 99284, and 99285. For purposes of Mercer’s LANE analysis, ED visits coded 99281, 99282 or 99283 (lower level of clinical complexity) are considered “potentially preventable”. Visits with an E&M procedure code of 99284 or 99285 (higher level of clinical complexity) are not included in the analysis of ED visits considered “potentially preventable”. These conditions are of high severity, may pose an immediate significant threat to life or physiologic function and require urgent evaluation by the physician or other health care professional. Conditions meeting these criteria are not considered potentially preventable.

The following is a description of LANE results grouped by SoonerCare Choice and SoonerCare Traditional populations. All tables and graphs prepared for the LANE analysis are presented in the comprehensive report.

Identification and Stratification of ED Visits

Mercer’s LANE analysis began with the identification of all ED visits within the study period. For this project, Mercer reviewed records of SoonerCare members’ ED visits between July 1, 2012 and December 31, 2013. In order to quantify the comprehensive cost of an ED visit, Mercer aggregated all claims for the same member at the same facility with the same date of service.

The total ED claims and total ED dollars for this eighteen-month study period (Exhibit 3) are as follows:

Exhibit 3: Total ED Claims and Total ED Dollars

Program	Total ED Visits	Total ED Dollars
SoonerCare Choice	612,769	\$149,135,722
SoonerCare Traditional	319,490	\$ 49,306,934

After all ED visits were identified and claims for an individual visit were aggregated, the medical diagnoses available on the visit record were compared to Mercer’s list of LANE diagnoses. The LANE diagnoses were categorized as “low-acuity non-emergent” based on the clinical severity of the condition that drove the member to the ED. Mercer reviewed all available diagnosis information for each ED claim and identified the subset of visits with a diagnosis on the list. For the SoonerCare Traditional population, 49.3% of ED visits and 52.2% of ED expenditures were categorized as LANE. For the SoonerCare Choice population, 71.5% of ED visits and 64.7% of ED expenditures were categorized as LANE. The average unit cost of a LANE visit was \$220.39 for the SoonerCare Choice population and \$163.53 for the SoonerCare Traditional population.

Mercer recognizes the significant challenges of influencing member behavior in a Medicaid population, as well as variation in clinical interpretations of the term “preventable”. As a result, each diagnosis in the LANE analysis is assigned a unique percentage which represents the portion of visits with that diagnosis code that could either be redirected to a more appropriate setting or avoided entirely. These percentages are applied to the observed utilization by diagnosis code to quantify the “potentially preventable” ED utilization. Mercer also considers the input of the attending physician through the procedure code information attached to the claim. Cases that are indicated as having the highest level of medical complexity (99284 or 99285) are not considered “potentially preventable”. Based on the severity these conditions require urgent evaluation in an emergency department setting and are not considered low-acuity non-emergent.

The SoonerCare ED utilization quantified by Mercer’s LANE algorithm as potentially preventable follows (Exhibit 4):

Exhibit 4: ED Utilization as Quantified by LANE Algorithm

	Total Potentially Preventable ED Visits	Total Potentially Preventable Visits as % of Total ED Visits	Total Potentially Preventable Dollars	Total Potentially Preventable Dollars as % of Total ED Dollars
SoonerCare Choice	161,957	26.4%	\$20,950,250	14.0%
SoonerCare Traditional	60,041	18.8%	\$ 5,173,759	10.5%

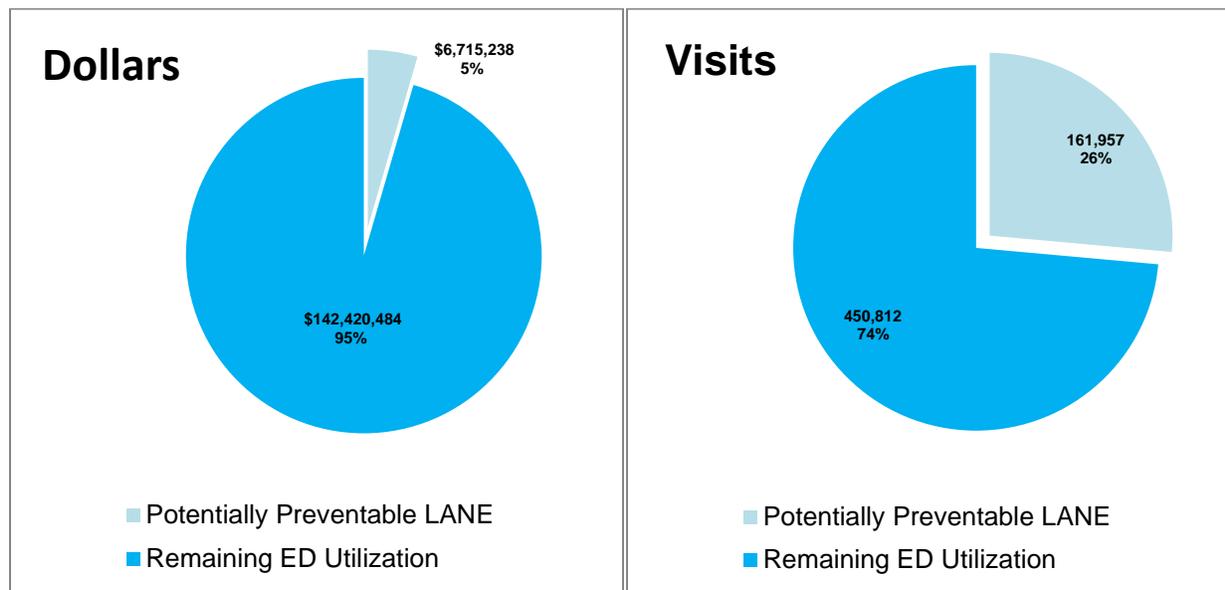
While many ED visits could have been avoided entirely, the final step of Mercer’s LANE analysis was to consider the costs of providing care in a more clinically appropriate and financially efficient setting. Mercer summarized the cost of physician office visits during the study period to quantify the cost of comparable visits to a primary care office, clinic, or specialist. The average cost per office visit for SoonerCare Traditional was \$54.41, and the average cost per office visit in SoonerCare Choice was \$93.09. The difference in average costs appeared to be based on underlying fees, rather than variation in the severity of cases. These unit costs were counted for each of the visits shown above as “potentially preventable”, which reduced the overall potential savings (See Exhibit 5, Exhibit 6 and Exhibit 7 below). For those individuals who incurred more than six LANE visits during the study period, Mercer only provided for six physician cost off-sets in the calculation.

Exhibit 5: Potentially Preventable ED Utilization After Physician Unit Cost Off-Sets

	Total ED Dollars	Total Potentially Preventable Dollars	Total Equivalent Provider Office Costs	Potentially Preventable Dollars	% of Total ED Dollars
SoonerCare Choice	\$149,135,722	\$20,950,250	\$14,235,012	\$6,715,238	4.5%
SoonerCare Traditional	\$ 49,306,934	\$ 5,173,759	\$3,072,467	\$2,101,292	4.3%

Exhibit 6: SoonerCare Choice Low-Acuity Non-Emergent (LANE) Analysis Results

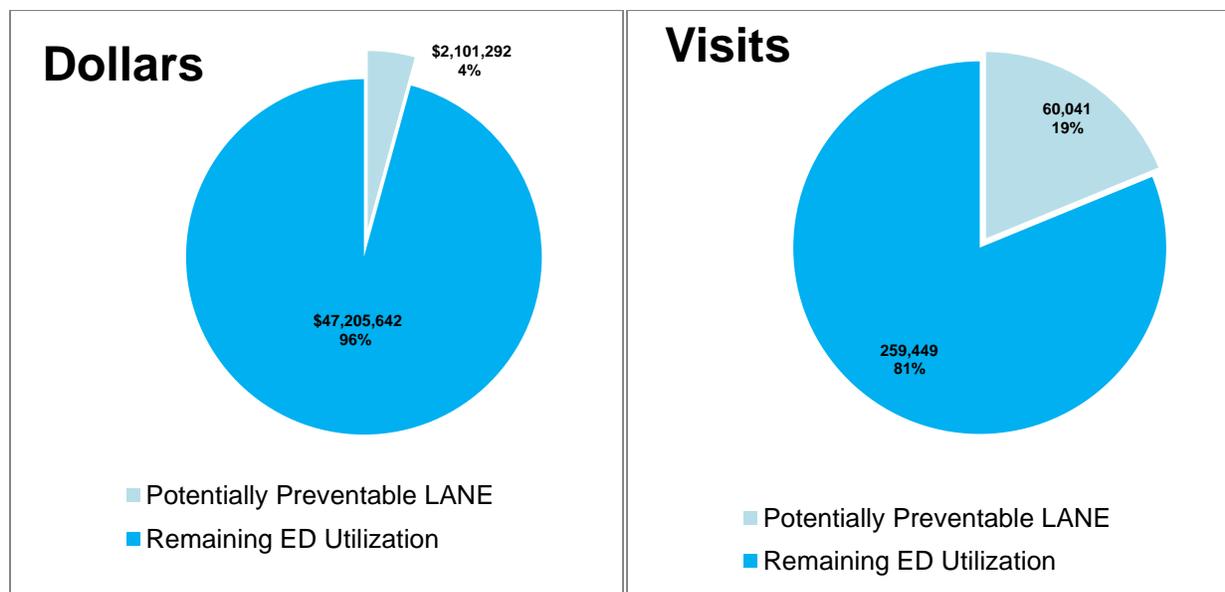
Source: Oklahoma Health Care Authority Medicaid Management Information System, July 2012–December 2013



1. All ED visits with a primary diagnosis on the list of 701 codes are identified as LANE. Mercer applies a specific percentage to each diagnosis code to adjust the LANE dollars and visits to the "Potentially Preventable LANE" subset of ED visits.

Exhibit 7: SoonerCare Traditional Low-Acuity Non-Emergent (LANE) Analysis Results

Source: Oklahoma Health Care Authority Medicaid Management Information System, July 2012–December 2013



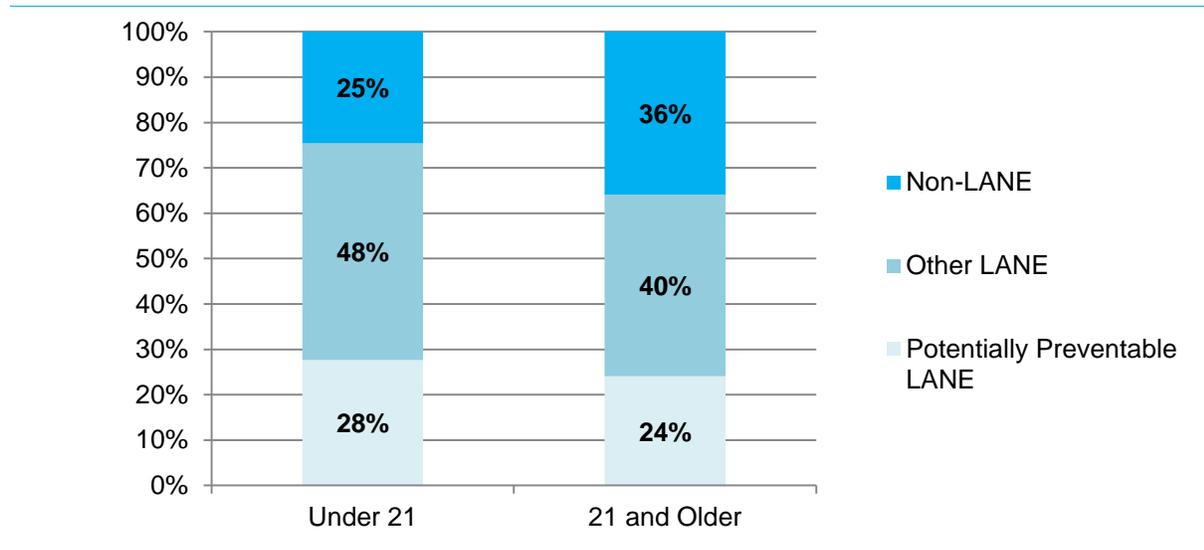
1. All ED visits with a primary diagnosis on the list of 701 codes are identified as LANE. Mercer applies a specific percentage to each diagnosis code to adjust the LANE dollars and visits to the "Potentially Preventable LANE" subset of ED visits.

Nearly 60% of the total Medicaid population in Oklahoma is under 21 years of age. In the SoonerCare Choice population under 21, the percentage is even higher at 79%. There are relatively few, 27%, under the age of 21 in the SoonerCare Traditional population. Although the percentage of the population under 21 in both SoonerCare plans varies significantly, about three-quarters of ED

visits for members under 21 of both plans can be classified as low-acuity. This low-acuity non-emergent utilization is represented by the combination of the “Other LANE” and “Potentially Preventable LANE” in Exhibit 8 and Exhibit 9.

Exhibit 8: SoonerCare Choice Low-Acuity Non-Emergent (LANE) Visit Statistics by Age Group

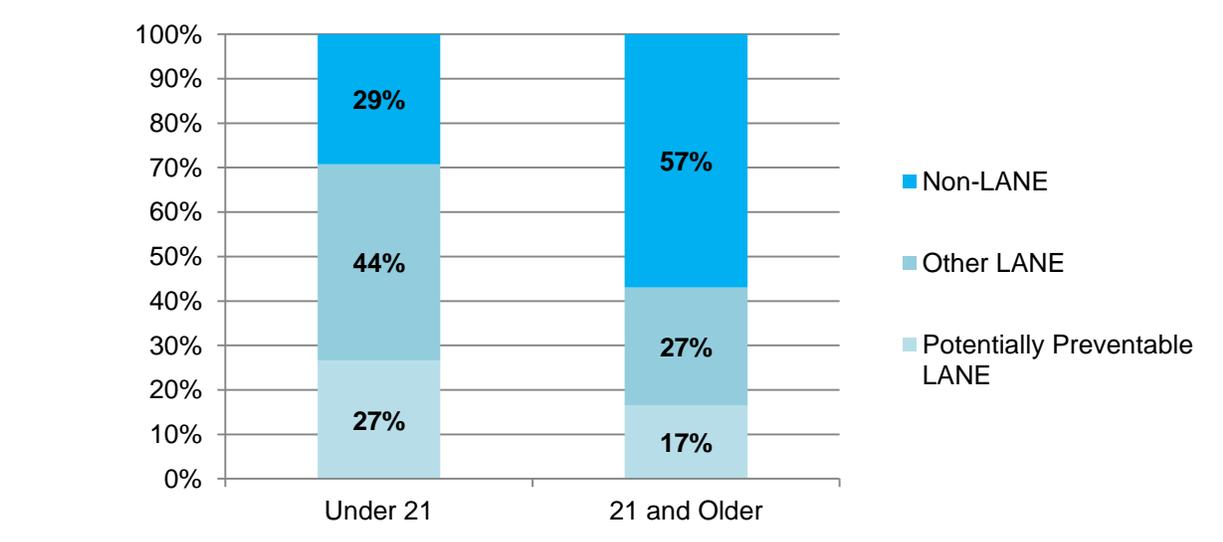
Source: Oklahoma Health Care Authority Medicaid Management Information System, July 2012–December 2013



1. All ED visits with a primary diagnosis on the list of 701 codes are identified as LANE. Mercer applies a specific percentage to each diagnosis code to adjust the LANE dollars and visits to the "Potentially Preventable LANE" subset of ED visits. The remaining visits, including all visits with CPT E&M codes 99284 and 99285, are considered "Other LANE".

Exhibit 9: SoonerCare Traditional Low-Acuity Non-Emergent (LANE) Visit Statistics by Age Group

Source: Oklahoma Health Care Authority Medicaid Management Information System, July 2012–December 2013



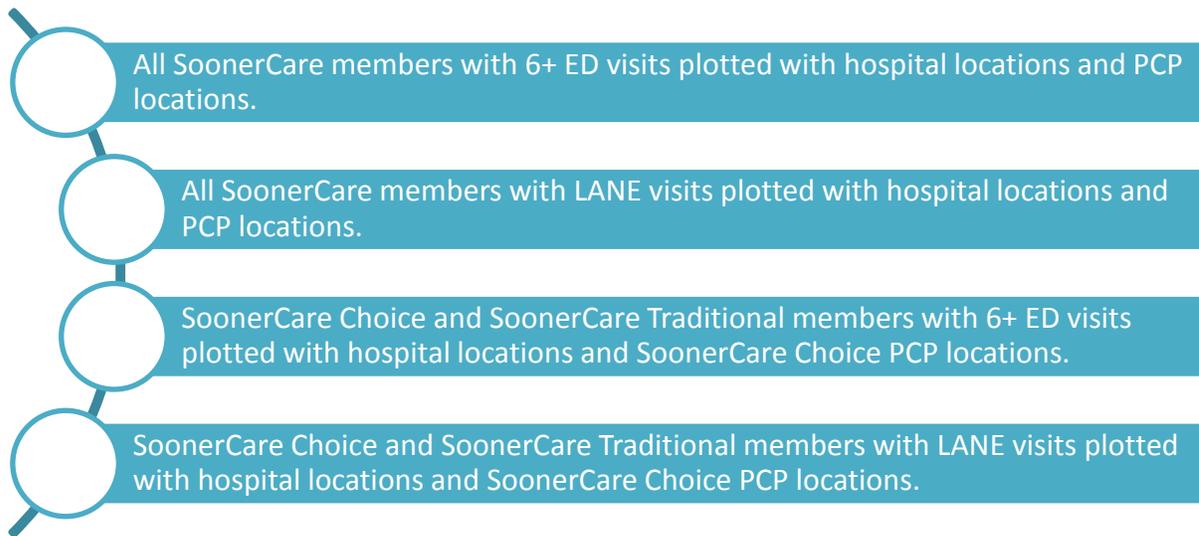
1. All ED visits with a primary diagnosis on the list of 701 codes are identified as LANE. Mercer applies a specific percentage to each diagnosis code to adjust the LANE dollars and visits to the "Potentially Preventable LANE" subset of ED visits. The remaining visits, including all visits with CPT E&M codes 99284 and 99285, are considered "Other LANE".

Geospatial Analysis

Geocoding is a process that converts address information to geographic coordinates (based on longitude and latitude), places the coordinates on a map, and then analyzes the coordinates in

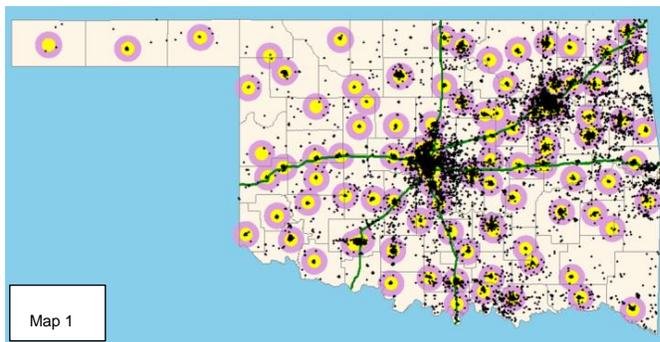
relation to other spatial data. In order to conduct the geospatial analysis, OHCA shared member eligibility, provider, and member claims data files with Mercer. Geospatial analyses were conducted for the state overall and specifically for the areas designated as rural. Maps were generated based on the groupings presented below (Exhibit 10). A selection of maps is included below.³

Exhibit 10: Geospatial Analyses for the State Overall and Designated Rural Areas



One of the key considerations while reviewing the maps is the black icons (members) that fall outside a yellow or purple icon. These icons represent areas where access to providers, either hospitals or primary care providers (PCPs), may be an issue.

Exhibit 11: Map 1



Map 1: All SoonerCare members with 6+ ED visits plotted with hospital locations

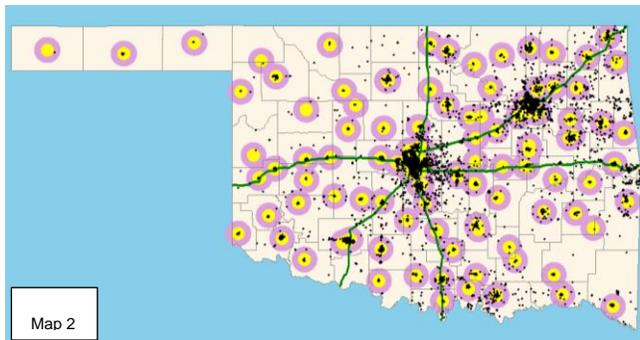
- A member address is represented by a black dot (n = 28,142).
- A yellow halo is a five mile radius from the address of a hospital (n=188).
- A purple halo is a ten mile radius from the address of a hospital.
- An interstate highway is represented by a green line.

As can be seen in Map 1 (Exhibit 11) and as described in the statistical analysis, the highest concentration of Medicaid members is located in the urban areas of Oklahoma City and Tulsa, and as expected, the most significant concentration of members with six or more ED visits are also

³ All maps can be found in the Mercer report, Oklahoma Emergency Department Utilization, November 5, 2015, Appendix B.

located in these urban locations. As noted in the statistical analysis, less than three percent of the members had six or more ED visits during the study period.⁴

Exhibit 12: Map 2

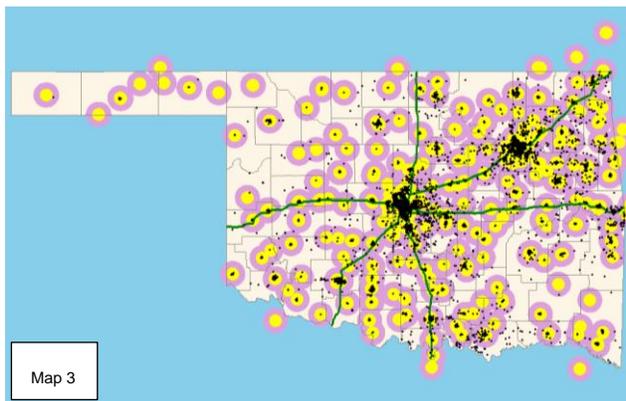


Map 2: SoonerCare Choice members with 6+ ED visits plotted with hospitals

- A member address is represented by a black dot (n = 9,100).
- A yellow halo is a five mile radius from the address of a hospital (n=188).
- A purple halo is a ten mile radius from the address of a hospital.
- An interstate highway is represented by a green line.

Again, as expected, the highest concentrations of SoonerCare Choice members with six or more ED visits are located in the urban locations of Oklahoma City and Tulsa. Interestingly, there are relatively few members who live more than ten miles from a hospital with six or more ED visits (Exhibit 12).

Exhibit 13: Map 3



Map 3: SoonerCare Choice members with 6+ ED visits plotted with SoonerCare Choice contracted PCPs

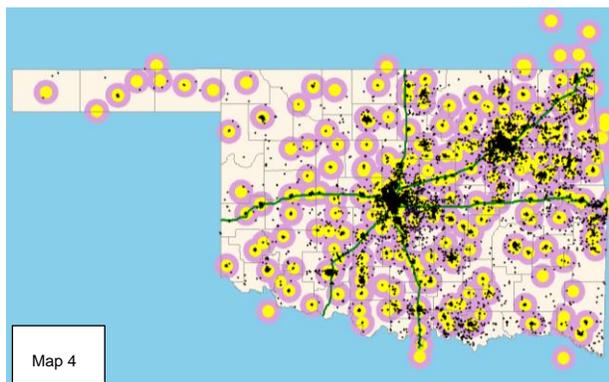
- A member address is represented by a black dot (n = 9,100).
- A yellow halo is a five mile radius from the address of a SoonerCare Choice PCP (n=1,048).
- A purple halo is a ten mile radius from the address of a SoonerCare Choice PCP.
- An interstate highway is represented by a green line.

Map 3 (Exhibit 13) shows the distance from a SoonerCare Choice member's address to a SoonerCare Choice contracted PCP. As can be seen, the majority of these members have access to a SoonerCare Choice contracted PCP within five miles and even more within ten miles. As described in the statistical analysis, while SoonerCare Choice members overall were more likely to be frequent ED utilizers, this was not the case if the member's chosen PCP was located within five miles of their home and the member was not part of the OHCA HMP or a HAN.⁵

⁴ The full statistical analysis can be found in the Mercer report, Oklahoma Emergency Department Utilization, November 5, 2015, Appendix B.

⁵ The full statistical analysis can be found in the Mercer report, Oklahoma Emergency Department Utilization, November 5, 2015, Appendix B.

Exhibit 14: Map 4

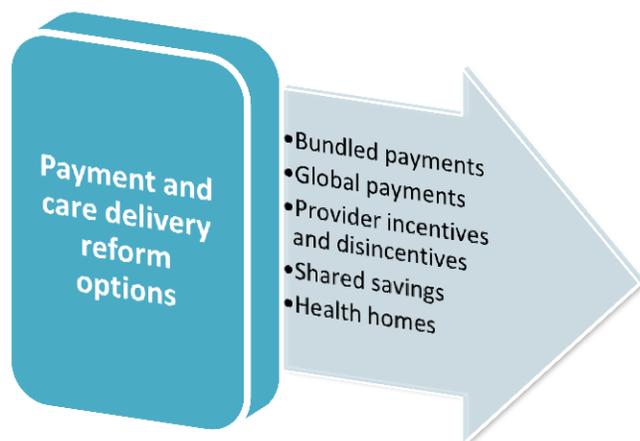


Map 4: SoonerCare Traditional members with 6+ ED visits plotted with PCPs

- A member address is represented by a black dot (n = 19,042).
- A yellow halo is a five mile radius from the address of a PCP (n=1,297).
- A purple halo is a ten mile radius from the address of a PCP.
- An interstate highway is represented by a green line.

Map 4 (Exhibit 14) shows the distance from a SoonerCare Traditional member's address to a PCP that participates in the Medicaid program. There are more members who visited the ED 6+ times represented who do not have a PCP within ten miles in comparison to the SoonerCare Choice population.

Exhibit 15: Payment and Care Delivery Reform Options



State Medicaid Approaches to Managing ED Utilization

Non-urgent use of the ED has been studied by both state Medicaid agencies and commercial insurers for decades. Despite the importance of appropriate ED use, uniform best practices have been slow to emerge due to the unique needs and challenges in states and local communities, as well as health care concerns of frequent ED users. There are, however, emerging ED diversion programs that demonstrate promise, especially in light of new payment reform options (as indicated in Exhibit 15). Mercer has reviewed seven state programs that could inform strategies in Oklahoma to impact ED utilization among Medicaid beneficiaries. These states are Colorado, Maryland, Massachusetts, Missouri, Oregon, Washington, and Wisconsin.

The lessons learned in each state program included in this report could allow Oklahoma to tailor selected payment and/or care delivery reform options and implement through state plan amendments (SPA) and/or waivers.

Colorado

Colorado's Accountable Care Collaborative is comprised of seven Regional Care Collaborative Organizations (RCCOs) that form a network of primary care medical providers (PCMPs) that support medical homes, and are ultimately responsible for reaching performance targets that focus

on ED use reductions, hospital readmission prevention, and lower outpatient service utilization of magnetic resonance imaging, computed tomography scans, and x-rays.⁶

The role of the RCCO is to work with participating PCMPs in any stage of medical home processes and assist with improving medical home services. Each RCCO operates differently and activities range from working with PCMPs to implement substance abuse screening to providing training on best care practices for managing chronic conditions to preventing overuse of ED services. One RCCO partnered with the fire department to get a frequent 911 caller, who made repeated ED visits, into intensive outpatient therapy and move into a sober living home.

The effect on ED visits has been, in some ways, mixed. For example, from state fiscal year SFY 2012 to SFY 2013, the number of ED visits increased for those enrolled in the program, but at a slower rate compared to the general Medicaid population. From SFY 2013 to SFY 2014, aggregate savings from the program totaled approximately \$31 million.⁷ Colorado also reported fewer ED visits for certain program enrollees.⁸ Adults enrolled in the program for more than six months utilized approximately 8% fewer ED services than adults not enrolled in the program. ED use by children with disabilities decreased by 7%, but doctor visits increased by 6%.

Maryland

The University of Maryland Upper Chesapeake Health (UM UCH) is a community-based, not-for-profit care system located in Harford County, Maryland. As part of a hospital inpatient and outpatient redesign initiative, UM UCH developed four key programs to provide a variety of interventions focused on empowering the ED physicians to control resources, including inpatient admissions, outpatient observation designations, discharge determinations and the use of advanced radiography and prescribing. Four key programs include:

1. **High-Risk Care Plan Program.** The High-Risk Care Plan Program targets individuals with over five ED visits, three hospital admissions, or one readmission in the past 12 months. Of the 844 individuals in the program, over 50% have shown a decrease in opioid prescriptions, and a 40–50% reduction in admissions, observation stays, and ED visits.
2. **Comprehensive Care Clinic.** The Comprehensive Care Clinic program targets individuals without a primary care provider, without insurance coverage, or those with high-risk follow-up care that puts them at risk for reengaging the ED. Outcomes data and return on investment are not yet available for this initiative.
3. **Standardized Care Pathways.** The Standardized Care Pathways program stems from the variation in care management and admitting patterns by ED physicians. Approximately 240

⁶Colorado Center on Law & Policy. "The Colorado Medicaid Accountable Care Collaborative Program," available at http://www.healthpolicyproject.org/Publications_files/Medicaid/ColoradoAccountableCarePresentation.pdf, accessed 3 June 2015.

⁷Colorado Department of Health Care Policy & Financing. "Creating a Culture of Change, Accountable Care Collaborative, 2014 Annual Report," available at <https://www.colorado.gov/pacific/sites/default/files/Accountable%20Care%20Collaborative%202014%20Annual%20Report.pdf>, accessed 2 June 2015.

⁸Colorado Department of Health Care Policy & Financing. "Colorado Medicaid Program Achieves Record Savings, Improved Outcomes," available at <https://www.colorado.gov/pacific/sites/default/files/Accountable%20Care%20Collaborative%20News%20Release%20and%20Fact%20Sheet%20-%20November%203,%202014.pdf>, accessed 2 June 2015.

individuals have been safely diverted from inpatient admission or observation status since use of the protocol began in October 2014. However, the length of stay in the ED has increased due to testing requirements at the one and three hour mark required by the protocol.

4. **Patient Call Back Program.** The Patient Call Back Program is designed to incentivize intervention by ED physicians in the transitions and follow-up care identified after an ED visit. ED physicians are paid to call up to two patients after a shift for \$20 per call, for up to thirty calls per month. To date, participation in the two EDs that are in the system is at 70%, with a 15% to 30% penetration rate for discharged patients.

Massachusetts

Between 2001 and 2011, the prevalence of pediatric asthma nationally increased nearly 2% and in 2010, Oklahoma spent approximately \$5 million in Medicaid funds on pediatric asthma care in the ED.⁹ Massachusetts has adopted the MassHealth Pediatric Asthma Bundled Payment Pilot Program, intended to improve health outcomes of children with asthma, to reduce asthma-related ED utilization, and ultimately lower associated Medicaid costs.¹⁰ Under the Pilot Program, children are eligible for participation if they meet certain qualifications, which include being between the ages of 2 and 18 and having “high-risk” asthma, which is defined by an asthma-related hospitalization or ED visit, an oral corticosteroid prescription for asthma in the last twelve months, or another indicator of poor asthma control. The children are also required to receive care at one of the pilot primary care sites enrolled in the program.

The pediatric asthma pilot includes two phases. The first phase provides greater flexibility of coverage for community-prevention services not covered by MassHealth, including community health worker home visits or environmental trigger mitigation supplies reimbursed with a \$50 PMPM capitated payment.¹¹ The second phase will incorporate the experiences of the first phase to develop a Medicaid bundled payment for children with high-risk asthma.

Missouri

In 2010, the Agency for Healthcare Research and Quality (AHRQ) reported that one in eight ED visits involved an individual with a mental disorder, substance abuse problem, or both.¹² The connection between mental health needs and ED care is confirmed in this and other reports, and anecdotally from emergency care providers in Oklahoma and across the country.

Missouri’s behavioral health home initiative has kept Medicaid beneficiaries out of hospitals and EDs, and averted care costs have saved \$2.9 million as of 2013.¹³ The behavioral health home

⁹Pearson W., Goates S., Harrykissoon S., Miller S. “State-Based Medicaid Costs for Pediatric Asthma Emergency Department Visits,” available at http://www.cdc.gov/pcd/issues/2014/14_0139.htm, accessed 8 June 2015.

¹⁰Medicaid. “Attachment J Master DSTI Plan,” available at <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/ma/MassHealth/ma-masshealth-attach-j.pdf>, accessed 8 June 2015.

¹¹The Brookings Institution. “A Case Study in Payment Reform to Support Optimal Pediatric Asthma Care,” available at <http://www.brookings.edu/~media/research/files/papers/2015/04/27-asthma-case-study/asthma-case-study.pdf>, accessed on 8 June 2015.

¹²Healthcare Cost and Utilization Project. “Emergency Department Use for Mental and Substance Use Disorders,” available at https://www.hcup-us.ahrq.gov/reports/ED_Multivar_Rpt_Revision_Final072010.pdf, accessed 5 June 2015.

¹³Department of Mental Health and MO Healthnet. “Progress Report, Missouri CMHC Healthcare Homes,” available at <http://dmh.mo.gov/docs/mentalillness/prnov13.pdf>, accessed on 4 June 2015.

state plan amendment (SPA) focuses on Medicaid enrollees who have comorbidities involving a serious and persistent mental health condition or substance use disorder. An eligible individual must also incur more than \$10,000 in Medicaid care costs during a twelve-month period.

Oregon

The Central Oregon Health Council is a public-private partnership to improve health outcomes in the region, including a particular focus on high health care utilizers. The council's ED diversion project reflects a promising initiative that has reduced low-acuity non-emergent visits to the ED, and concurrent ED costs in central Oregon.

The ED diversion project targeted 144 frequent users, defined as having had ten or more ED visits in a twelve-month period. A majority (83) of those targeted were enrolled in Medicaid. Of the 144 targeted frequent users, 79 were enrolled in the project, which included a four-tiered intervention process. The intervention process began with the development of a community wide treatment plan for each frequent user and then shifted to the services of "health engagement teams" (comprised of a physician, registered nurse (RN) case manager, psychologist or social worker, community health workers, and representation from the patient-centered primary care home (PCPCH). A central component is the use of electronic health records that can be accessed by all regional hospitals and the patient's health home. Community health workers utilize an approach known as the "Pathways Model" of care to help patients resolve issues such as connecting to medical homes and chronic disease management.

Behavioral health consultants were integrated into the PCPCH to better address comorbid mental health needs of high utilizers. Adding behavioral health consultants to the PCPCH has increased compliance with follow-up care from 15% to 90%.¹⁴

In its first year of implementation, there was a 49% decrease in ED visits between the first six months of 2011 and the same period in 2010. This translates to a reduction of 541 ED visits, approximately 300 visits of which were attributed to Medicaid enrollees. ED savings attributed to Medicaid patients amounted to \$3.132 million for just that six month period. Enrollment of subsequent targeted high utilizers in the program in 2011 showed similar progress of reducing repeat ED visits.

Washington

Washington State's "ER is for Emergencies" program focuses on the following seven best practices in hospital settings:¹⁵

- Development and use of interoperable electronic health information.
- Dissemination of patient education materials on appropriate resources for care.
- Identification of frequent ED users (5+ ED visits in the past twelve months).
- Development of patient care plans for frequent ED users, including assistance in contacting the individual's PCP.
- Use of narcotics guidelines to reduce drug-seeking and drug-dispensing to frequent ED users.

¹⁴Ibid.

¹⁵Washington State Health Care Authority. "ER is for Emergencies, Seven Best Practices," available at <https://www.wsha.org/images/activEdit/ERisforEmergenciesSevenPractices.pdf>, accessed 6 June 2015.

- Implementation of a prescription monitoring program for oversight on prescribed controlled substances.
- Utilization of feedback information, including the designation of hospital staff to ensure that interventions are working.

Under the program, hospitals were required to implement the seven best practices presented above, or be subject to nonpayment of non-emergency ED visits. As a result of the program, the rate of ED visits declined by 9.9% and the rate of frequent users declined by 10.7% from implementation in June 2012 to June 2013.¹⁶ The Washington State Health Care Authority also reported that savings reached its Medicaid savings goal of \$33.6 million in fee-for-service (FFS) emergency care costs.

Wisconsin

In 2007, the Milwaukee Health Care Partnership launched the Emergency Department Care Coordination Initiative, a program to reduce inappropriate ED use by Medicaid and uninsured patients, which has resulted in better access to primary care, better linkage to a medical home, and reduced ED visits.

The ED initiative identifies targeted patients and refers them to a health home.¹⁷ Patients targeted for the initiative are those who are enrolled in Medicaid or are uninsured, have a chronic condition, are pregnant, or have four or more ED visits over a twelve-month period.

After a patient has been identified, the ED case manager educates patients about appropriate ED use and the importance of having a primary care medical home and then schedules a follow-up appointment with a primary care provider at a federally qualified health center (FQHC) or clinic. An electronic scheduling system displays available appointments with the FQHCs and clinics, and allows the ED case manager to schedule the appointment directly. Before the medical home appointment, the FQHC or clinic staff calls the patient with encouragement to keep the appointment.

In 2012, ED case managers scheduled more than 6,700 appointments at FQHCs and other safety net clinics. Of the appointments scheduled at FQHCs, 41% were fulfilled the first time. Fifty-seven percent of those patients who kept their initial appointment returned for a second appointment within six months. For patients who kept their scheduled appointments, there was a 44% reduction in the number of ED visits.¹⁸

¹⁶Washington State Health Care Authority. "Emergency Department Utilization: Update on Assumed Savings from Best Practices Implementation," available at http://www.hca.wa.gov/documents_legislative/EmergencyDeptUtilization.pdf, accessed 6 June 2015.

¹⁷Agency for Healthcare Research and Quality. "Emergency Department-Based Case Managers throughout County Electronically Schedule Clinic Appointments for Underserved Patients, Allowing Many to Establish a Medical Home," available at <https://innovations.ahrq.gov/node/4993>, accessed 4 June 2015.

¹⁸Ibid.

Conclusion

The State of Oklahoma is not alone in the challenges it faces managing ED utilization, as indicated by Exhibit 16. This is a multifaceted issue facing all states and delivery systems, FFS and capitated managed care. There are multiple stakeholders, sometimes with competing interests and needs. There is no one approach that fits all, no silver bullet.

How can ED utilization be impacted?

- **Members** visit an ED both for emergencies and for conditions that are considered low-acuity and primary care treatable, and could be managed in an outpatient setting. However, EDs are open 24/7 with no appointment needed and there is no real incentive for Soonercare members to choose a non-emergency setting in many instances. Also, for some members, the ED is the primary resource for medical care.
- **Hospitals** use EDs as an integral part of the healthcare delivery system. EDs also are an important revenue stream. It is in the hospital's interest to advertise the services and convenience available in their ED. However, the opportunity for revenue and drawing patients in has led to some challenges for hospitals in overcrowding, patient management, and use of the ED for primary care treatable and low-acuity conditions.
- **PCPs** are a key to providing high quality health care for Medicaid members and represent an opportunity to impact ED utilization, especially for those with close physical proximity to patients. One challenge is the limited number of PCPs throughout the state, particularly those providing care to Medicaid members. Fewer PCPs results in less availability of primary care. Another, in contrast to EDs which are always open, is office hours with specific appointment availability that may be perceived as inconvenient by members.
- **The OHCA** is not an individual receiving or providing direct care, but it does have a role in ED utilization. The Soonercare Choice delivery model developed by the OHCA provides additional reimbursement to a PCP selected by a member serving as a medical home to engage that member in care through proactive outreach, delivery of care coordination services and/or linking them to community programs and services in an effort to assist the member in navigating the health care system and receiving care in the most appropriate and cost effective setting.

Exhibit 16: Challenges in ED Utilization

- Soonercare members incurred 221,998 potentially preventable ED visits at a total cost of over \$26 million.
- After accounting for costs of physician visits that could have occurred instead of the ED visit, \$8,816,530 could have been saved by the State.

While initiatives are often focused on one of the stakeholders above, the most positive outcomes are often realized when ED utilization is addressed with members, hospitals, and PCPs as a whole. The OHCA's role in regard to reducing ED utilization is perhaps most important since the OHCA has the ability to implement initiatives to assist its' members in attaining high quality care and positive health outcomes while managing cost. Continued development of the HANs and recognition of provider practices as patient centered medical homes, furnishing care coordination and case management programs, initiatives and programs carried out or considered in other states, and a deeper dive into the data will provide more opportunity for Oklahoma to reach the goal of most appropriately managing utilization in the best manner for the SoonerCare population.



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